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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/862,803      | 05/22/2001  | Bernhard Kern        | 1625                | 1185             |

7590

09/12/2003

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EXAMINER

LIN, KUANG Y

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/862,803

Applicant(s)

KERN, BERNHARD

Examiner

Kuang Y. Lin

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 01 August 2003 and 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 8-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-7 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

1. Applicant in response to the objection to the drawing by sketching the changes to be made without submitting corrected formal drawings. Applicants is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. Applicant is further advised that the corrected formal drawings are required in reply to this office action to avoid abandonment of the application. The requirement for the corrected formal drawings will not be held in abeyance.
2. Applicant is advised that claim 15 filed on August 1, 2003 had been changed to "claim 16". (See rule 1.126).
3. The amendment to page 9, lines 5-20 of the specification is objected to in that the reference numeral for the heating means shall be "2" rather than "20". Also, in the amendment to page 10, lines 1-10 of the specification, it is not clear what "bubble storage" is.
4. Claims 1-7 are again rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6, it is not clear what structure arrangement that the system is closed from outside. In claims 2 and 3, it is not clear how the additional solid light metal is supplied and where the antecedent basis in the specification for the claimed feature is. In claim 5, it is not clear how the metal can be solidified by simply moving the tool device away. In claim 7, there is a lack of antecedent basis in the specification for the claimed feature.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 and 16 insofar as definite are rejected under 35 U.S.C. 103(a) as being unpatentable over DE-44 31 865 and further in view of either Jorn et al, Blum et al, Muller or JP 63-268,559 for the same reasons as set forth in the last office action.

Namely, DE '865 substantially shows the invention as claimed except that it does not show to provide heating means at the lower end of the molten metal dosing chamber. However, each of the secondary references shows to provide heating means at the lower end of the molten metal dosing chamber such that to ensure free flow of the molten metal from the dosing chamber into the casting mold. It would have been obvious to provide the heating means of the secondary references in the casting apparatus of DE '865 such that to facilitate the molten metal dispensing process.

7. Applicant's arguments filed August 1, 2003 and September 8, 2003 have been fully considered but they are not persuasive.

a. In page 26 of the remarks of August 1, applicant stated that DE '865 can not obtain a stable protective gas atmosphere since it required an overpressure of 0.5-0.3 bar to obtain a stable protective gas atmosphere. However, the scope of the claim does not include that limitation.

b. In pages 26-27 of the remarks of August 1, applicant stated that DE '865 does not require a clear separate point of the instant invention. However, the scope of the claim does not include that limitation.

c. In pages 27-28 of the remarks of August 1, applicant broadly stated that all the secondary references do not disclose the claimed manufacturing process. However, all the secondary are cited to show that it is conventional to provide a heated conical nozzle for dispensing molten metal such that to maintain the molten metal in a designated temperature when it leaves the nozzle. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

d. In page 2 of the remarks of Sept. 8, applicant stated that the term "bubble" storage identifies a corresponding embodiment of the pressure storage. However, the specification does not make that point clear. Further, it is not a conventional expression to state that the bubble storage is the pressure storage.

e. With respect to the argument as appearing in page 2 of Sept. 8, the induction coil of Blum et al will heat the molten metal in addition to shaping the molten metal jet.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

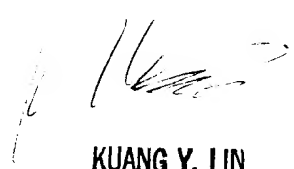
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuang Y. Lin whose telephone number is 703-308-2322. The examiner can normally be reached on Monday-Friday, 10:00-6:30,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas X Dunn can be reached on 703-308-3318. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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KUANG Y. LIN  
EXAMINER  
GROUP 320  
1725